

IN THE DRAWINGS:

Please amend Figure 10 by replacing the existing drawing sheet containing existing Figure 10 with the replacement drawing sheet containing amended Figure 10 as indicated attached Appendix B.

Please add Figure 16 by adding the new drawing sheet containing added Figure 16 as indicated in attached Appendix C.

REMARKS

The Office Action dated June 29, 2006, has been received and carefully considered. In this response, the specification, claims 151, 159, 169, 177, 182, 184, 185, 187, and 188, and Figure 10 have been amended, and Figure 16 has been added. Entry of the amendments to the specification, claims 151, 159, 169, 177, 182, 184, 185, 187, and 188, and Figure 10, and the addition of Figure 16 is respectfully requested. Reconsideration of the outstanding objections/rejections in the present application is also respectfully requested based on the following remarks.

I. THE INFORMATION DISCLOSURE STATEMENTS

An Information Disclosure Statement, an accompanying PTO-1449 form, and 8 references were filed on February 2, 2005. There is presently no indication that the Examiner considered the references identified in that Information Disclosure Statement. Accordingly, the Examiner is respectfully requested to acknowledge consideration of the references identified in that Information Disclosure Statement by initialing the PTO-1449 form and returning a copy of the initialed form to the undersigned.

Also, an Information Disclosure Statement, an accompanying PTO-1449 form, and non-U.S. patent cited references were filed on February 6, 2004. There is presently no indication that the Examiner considered all of the references identified in that Information Disclosure Statement. Specifically, the Examiner returned a partially initialed PTO-1449 form to the Applicants. The unnumbered reference by D. James on page 2 of the PTO-1449 form was not initialed by the Examiner in the partially initialed PTO-1449 form returned to the Applicants. Accordingly, the Examiner is respectfully requested to acknowledge consideration of the D. James reference on page 2 of the PTO-1449 form by initialing the box adjacent to the D. James reference on page 2 of the PTO-1449 form and returning an initialed copy of page 2 of the PTO-1449 form to the undersigned.

II. THE NON-COMPLIANCE OF THE PRELIMINARY AMENDMENT

On page 2 of the Office Action, and in the accompanying Notice of Non-Compliant Amendment, the amendments to the Abstract and the Drawings were considered non-compliant.

Applicants have resubmitted the amendments to the Abstract and the Drawings to address the Examiner's concerns.

In view of the foregoing, it is respectfully requested that the amendments to the Abstract and the Drawings be entered.

III. THE OBJECTION TO THE DRAWINGS

On pages 2-3 of the Office Action, the drawings were objected to under 37 CFR 1.83(a). This objection is hereby respectfully traversed.

The Examiner asserts that the controller and details of the controller as recited in claims 169-181 and 185-188 must be shown or cancelled from the claims.

Applicants respectfully submit that the claimed controller device and its details are already well supported in the Figures. For example, Figure 2 shows a CPU 11 having a device interface 161. Such a CPU 11 may be a controller device as supported in the specification (see page 13, lines 13-16). Also, Figures 10-14 show features of the device interface 161 in accordance with an embodiment of the claimed invention, including input receiver circuitry 71 and 72 and output driver circuitry 76 (see from page 53, line 4, to page 59, line 2).

In view of the foregoing, it is respectfully requested that the aforementioned objection to the drawings be withdrawn.

IV. THE ENABLEMENT REJECTION OF CLAIMS 151-188

On page 3 of the Office Action, claims 151-188 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. This rejection is hereby respectfully traversed.

The Examiner asserts that the specification does not describe a memory controller or a method of operating a memory controller.

The claims are directed to controller devices that interact with memory devices. Such controller devices are well supported in the specification and drawings. For example, the specification on page 13, lines 13-17, page 20, lines 24-25, and page 21, lines 18-20, and Figures 2 and 3, describe and illustrate a master 11 (e.g., a CPU or bus controller) controlling a memory device 13. Figure 2 shows a CPU 11 having a device interface 161. Such a CPU 11 may be a controller device as supported in the specification (see page 13, lines 13-16). Also, Figures 10-14 show features of the device interface 161 in accordance with an embodiment (e.g., input receiver circuitry 71 and 72 and output driver circuitry 76 (see from page 53, line 4, to page 59, line 2)).

In view of the foregoing, it is respectfully requested that the aforementioned written description rejection of claims 151-188 be withdrawn.

V. THE INDEFINITENESS REJECTION OF CLAIMS 166, 167, & 185-187

On pages 3-4 of the Office Action, claims 166, 167, and 185-187 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the invention. This rejection is hereby respectfully traversed.

Regarding claim 166, the Examiner asserts that the term "about the same" with respect to the read and write delays is vague and indefinite as there does not appear to be any indication in the specification regarding the time or length of delays or their relation.

Applicants respectfully submit that the specification describes "access-time registers which store a set of one or more delay times at which the device can or should be available to send or receive data" (see page 14, lines 10-12). The specification also describes that:

The time after which a data block is driven onto the bus lines is selected from values stored in slave access-time registers. *The timing of data for reads and writes is preferably the same; the only*

difference is which device drives the bus. For reads, the slave drives the bus and the master latches the values from the bus. For writes the master drives the bus and the selected slave latches the values from the bus. (see page 21, lines 13-20 (emphasis added))

Accordingly, it is respectfully submitted that the term "about the same" with respect to the read and write delays is not vague and indefinite, and is fully supported by the specification.

Claim 167 was rejected based upon its dependence on claim 166. Applicants respectfully submit that the rejection of claim 167 is moot in view of the arguments set forth above with respect to claim 166.

Regarding claim 185, the Examiner asserts that the first occurrence of the term "the memory device" lacks antecedent basis.

Claim 185 has been amended to address the Examiner's concerns.

Claims 186 and 187 were rejected based upon their dependence on claim 185. Applicants respectfully submit that the rejection of claims 186 and 187 is moot in view of the amendment to claim 185.

In view of the foregoing, it is respectfully requested that the aforementioned indefiniteness rejection of claims 166, 167, and 185-187 be withdrawn.

VI. THE AMENDMENT OF CLAIMS 151, 159, 169, 177, 182, 184, 185, 187, AND 188

In order to better clarify the subject matter being claimed, Applicants have amended claims 151, 159, 169, 177, 182, 184, 185, 187, and 188. No new matter has been added.

VII. CONCLUSION

In view of the foregoing, it is respectfully submitted that the present application is in condition for allowance, and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number, in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application.

To the extent necessary, a petition for an extension of time under 37 CFR § 1.136 is hereby made.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0206, and please credit any excess fees to the same deposit account.

U.S. Patent Application No.: 10/716,596
Attorney Docket No.: 57941.000063
Client Reference No.: RA001.2003.2.C.US

Respectfully submitted,

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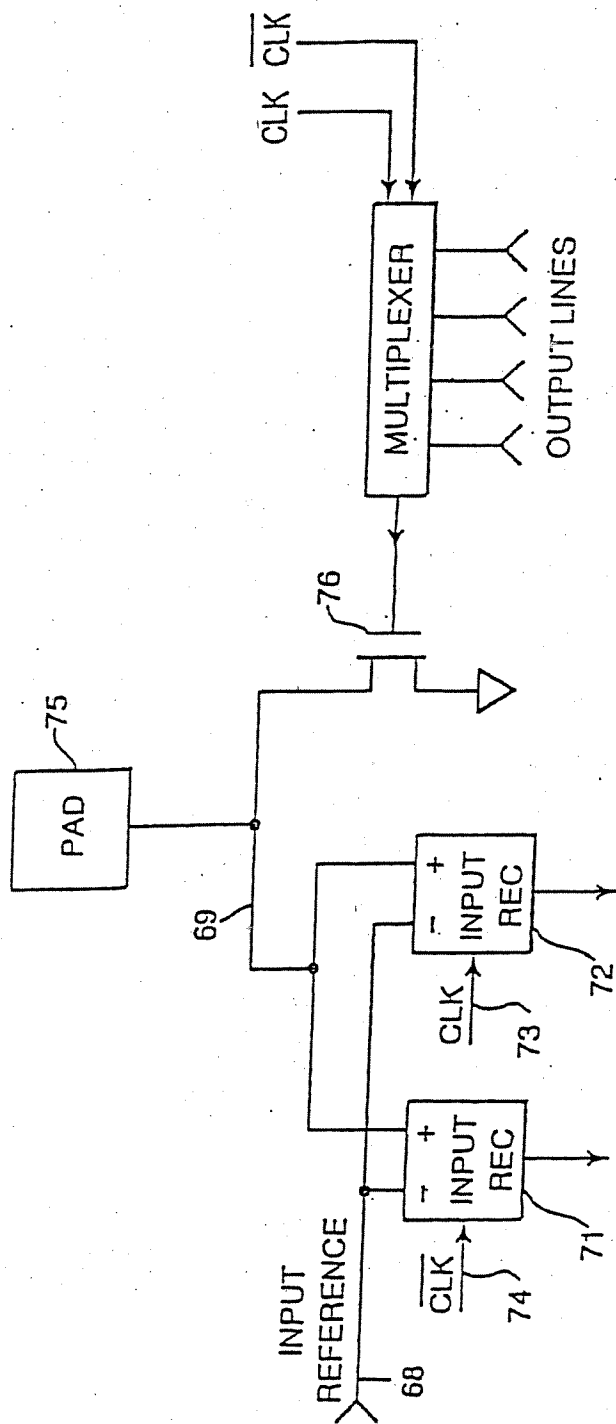
Date: September 29, 2006

APPENDIX A

A controller device and method for operating same is disclosed. In one particular exemplary embodiment, the controller device may comprise output driver circuitry and input receiver circuitry. The output driver circuitry may output a value, a first operation code, a block size value, and second operation code. The first operation code may represent an instruction to a memory device to store the value in a register in the memory device. The block size value may indicate an amount of read data to be output by the memory device in response to the second operation code. The second operation code may represent an instruction to the memory device to perform a read operation. The input receiver circuitry may sample a first portion of the read data output by the memory device after a read delay following the outputting of the second operation code.

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APPENDIX B



THE

U.S. Patent Application No.: 10/716,596
Attorney Docket No.: 57941.000063
Client Reference No.: RA001.2003.2.C.US

APPENDIX C

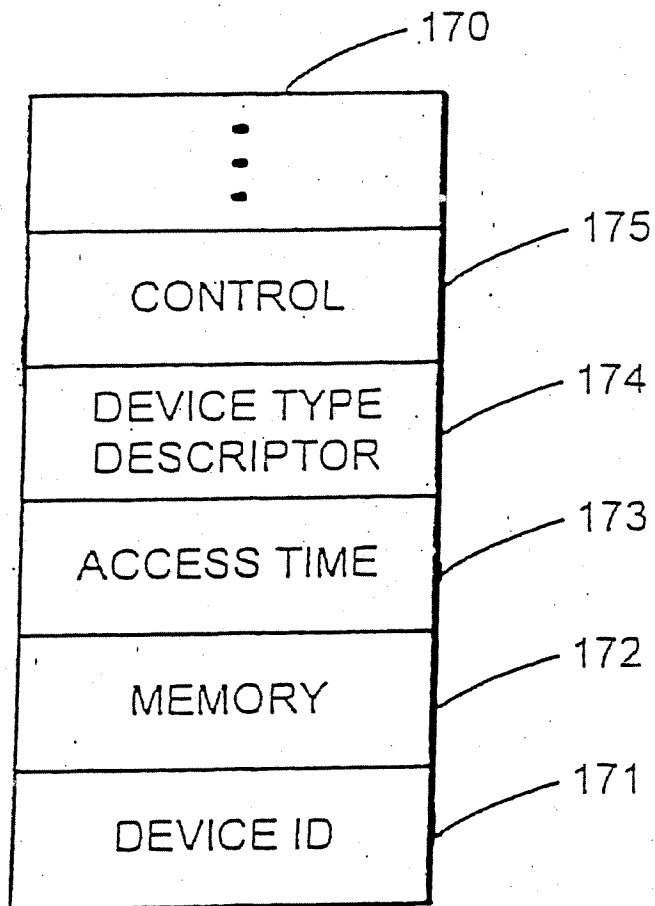


FIG. 16